UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/431,437	11/01/1999	TOMOHISA SHIGA	450100-3598.	8694

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EXAMINER
SALCE, JASON P

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/431,437	SHIGA ET AL.
	Examiner	Art Unit	
	Jason P Salce	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
     closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _40-59 and 87-126_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _40-59 and 87-126_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _01 November 1999_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a) ☐ All   b) ☐ Some * c) ☐ None of:
     1. ☐ Certified copies of the priority documents have been received.
     2. ☐ Certified copies of the priority documents have been received in Application No. _____.
     3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
           application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they do not include the following reference sign(s) mentioned in the

description: 303-1, 240. A proposed drawing correction or corrected drawings are

required in reply to the Office action to avoid abandonment of the application. The

objection to the drawings will not be held in abeyance.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11
F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,*
418 F.2d 528, 163 USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be
used to overcome an actual or provisional rejection based on a nonstatutory double
patenting ground provided the conflicting application or patent is shown to be commonly
owned with this application. See 37 CFR 1.130(b).
Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

2.   Claims 40-59 and 87-126 are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claims 29-40, 60-61, 82-

83, and 85-86 of U.S. Patent No. 6,005,562. Although the conflicting claims are not

identical, they are not patentably distinct from each other because the claims of the

instant application are broader than the patented claims, and are therefore anticipated

by the patent (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

In regards to independent claim 40 of the instant application, see claim 29 of the '562 patent for an apparatus that contains identical limitations, except for the limitation of a "program" in the instant application, as opposed to a "first program" in the '562 patent. Again, since the limitation "program" is broader than the limitation "first program", claim 40 of the instant application is anticipated by the specific claim 29 in the '562 patent (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

Allowance of claim 40 would result in the unwarranted time-use extension of the monopoly granted for the invention as defined in claim 29 of the '562 patent.

Referring to claims 41-49 of the instant application, see claims 30-32, 60, 40, 33-34, 61 and 35 of the '562 patent, respectively.

Referring to claims 50-51 of the instant application, see claim 82 of the '562 patent. Also note that the limitations of claims 49, 47, 46, 41 and 40, are all covered by claim 82.

Referring to claims 52-57 of the instant application, see claims 83, 36-39 and 85 of the '562 patent, respectively.

Referring to claims 58-59 of the instant application, see claims 86 of the '562 patent.

In regards to independent claim 87 (and all subsequent independent claims) of the instant application, see claim 1 of the '562 patent for an apparatus that contains identical limitations, except for the limitation of "image-based promotional data" in the instant application, as opposed to a "EPG data" in the '562 patent. Again, since the

limitation "image-based promotional data" is broader than the limitation "EPG data",

claim 87 of the instant application is <u>anticipated</u> by the specific claim 1 in the '562 patent

(see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

Allowance of claim 87 (and all subsequent independent claims) of the instant

application would result in the unwarranted time-use extension of the monopoly granted

for the invention as defined in claim 1 of the '562 patent.

Referring to claim 88 of the instant application, see claim 1 of the '562 patent.

Referring to claims 89-98 of the instant application, see claims 2-5, 9-13, 16, and

52 of the '562 patent, respectively.

Referring to claims 99-100 of the instant application, see claim 21 of the '562

patent.

Referring to claims 101-113 of the instant application, see claims 22-25, 29-30,

32, 31, 35, 80, 36, 65 and 41 of the '562 patent, respectively.

Referring to claims 114-115 of the instant application, see claim 42 of the '562

patent.

Referring to claims 116-117 of the instant application, see claims 68 and 43 of

the '562 patent, respectively.

Referring to claim 118 of the instant application, the examiner notes that it would

have been obvious to multiplex compressed image-based promotional data together

with program data.

Referring to claims 119-121 of the instant application, see claims 45, 76 and 46

of the '562 patent, respectively.

Referring to claims 122-123 of the instant application, see claim 47 of the '562

patent.

Referring to claims 124-125 of the instant application, see claims 77 and 81,

respectively.

Referring to claim 126 of the instant application, the examiner notes that it would

have been obvious to pre-store and display indicia.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

3.   Claims 40-47, 49, 52-59, 87-90, 92-97, 99-103, 105-109, 111-115, 117, 119-123

and 125 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Lawler et

al. (U.S. Patent No. 5,805,763).

Referring to claim 40, Lawler discloses an apparatus for receiving EPG and

program data (see set top box 18 in Figure 2 and Column 5, Lines 57-67) transmitted on

plural broadcast channels (see Column 5, Lines 4-16), said EPG data including image

data representing images of reduced, less than normal size to identify respective

programs (see Column 4, Lines 42-43 for the EPG data containing a link to a video

preview (i.e. image <u>data</u>), and note that according to EPG displayed in Figure 3, the

video preview is of a reduced size), which currently are and will be transmitted on

several broadcast channels (again see Column 5, Lines 4-16 for transmitting digital data

in a specific range of frequencies) and said program data including video and audio

data of plural programs currently being transmitted on respective broadcast channels

(note that the examiner is reading program data on either the digital video supplied by

the continuous media server 32 at Column 4, Lines 24-28 or the actual analog programs

being transmitted from the analog feed 40 in Figure 1). The examiner notes that the

limitation program data is broad and can read on either the digital or the analog program

data.

Lawler also discloses receiving the program data transmitted on different

broadcast channels and the EPG data from the received program data (see Column 5,

Lines 57-67 and Figure 2 for a set top box that receives all the digital and analog data

transmitted from the headend).

Lawler also discloses separating the received EPG data from the received

program data (see again Column 5, Lines 57-67 for a digital video decoder 54 and

analog demodulator 52 in Figure 2).

Lawler also discloses storing the separated EPG data (see Column 9, Lines 63-

66).

Lawler also discloses displaying a program represented by the separated

program data (see Column 5, Lines 50-56).

Lawler also discloses selectively retrieving the EPG data from the memory (see

Column 10, Lines 4-8 and note that since the EPG can be accessed by the CPU, and

as disclosed in the previous limitation, that the EPG is stored in memory, in order for the

interactive station 18 to properly display the EPG, it would inherently have to retrieve

the data from memory).

Lawler also discloses displaying on the display images of reduced, less than

normal size represented by said retrieved EPG data in superposition over the displayed

program (see Column 8, Lines 35-37 for displaying the image data in a preview window

and Column 6, Lines 19-27 for superimposing any digital and analog video data on a

display).

Referring to claim 41, Lawler discloses that the EPG data further includes text

data representing information associated with each program identified by said image

data (see Figure 3 for an EPG, which contains image data (window 110) and text data

(elements 112 and 114), which is text data related to the highlighted program in the

program grid), and retrieving the text data from storage and supplying the text data to

the display means (see Column 7, Lines 20-32).

Referring to claim 42, Lawler discloses selecting one of the displayed reduced

size images to retrieve from storage text data associated with the program identified by

the selected reduced size image for display (see again Figure 3 for selecting a program

in the program grid, which in turn, selects a reduced size image to display in the preview

window 110 and in response to this selection also displays summary information below

the preview window).

Referring to claim 43, Lawler discloses that text data includes title data,

broadcast data, identifying data, time and broadcast channel at which said associated

program is to be transmitted, and description data providing a description of said

associated program (see again Figure 3 for all of these data items).

Referring to claim 44, Lawler discloses a cursor (see element 102 in Figure 3)

and cursor control means operable by a user to position said cursor at a desired one of

the displayed reduced size images and thereby select said desired reduced size image

(see Column 6, Lines 57-67 and Column 7, Lines 1-9).

Referring to claim 45, Lawler discloses that EPG data identifies programs which

are currently being transmitted (see Figure 3 for the EPG identifying programs and there

broadcast time), and an image selecting means (see rejection of claim 42) and tuning

the apparatus to the broadcast channel which transmits the program identified by the

selected reduced size image (see Column 5, Lines 62-65).

Referring to claim 46, see rejection of claim 43.

Referring to claim 47, see summary panel 108 in Figure 3.

Referring to claim 49, Lawler discloses that EPG data is multiplexed with

program data (see MUX 42 in Figure 1 for multiplexing data from the EPG server 34

and analog feed 40).

Referring to claim 52, see rejection of claim 45 for a tuning means, claim 1 for a

memory means and display means.

Referring to claim 53, Lawler discloses that one of the broadcast channels

contains a promotional channel (see Column 5, Lines 10-16 for transmitting digital data

which contains promotional previews from continuous media server 32 in a particular

frequency band of channels) and the program data transmitted thereon is promotional

video and audio data representing particular programs transmitted on several other

broadcast channels (see summary panel 108 with preview window 110 in Figure 3).

Referring to claim 54, Lawler discloses displaying retrieved text data in

superposition over a promotional video display as a table of programs transmitted on

non-promotional broadcast channels (see again Figure 3 for displaying summary text

and title, channel and time text data over a promotional EPG and also note Column 6,

Lines 15-27 for mixing such data for display).

Referring to claims 55-56, see rejection of claim 54.

Referring to claim 57, Lawler discloses a memory for pre-storing predetermined

display indicia (see Column 7, Lines 24-28), receiving as part of the EPG, data access

information for accessing selected display indicia (see Column 4, Lines 40-46), reading

out selected display indicia in response to the received access information (see Figure 3

and Column 8, Lines 21-34), and displaying the indicia in superposition over said

displayed program (see again Figure 3 and Column 6, Lines 20-28).

Referring to claim 58, see rejection of claim 42 for the selecting means and claim

54 for superimposing text on the display.

Referring to claim 59, see again the summary panel 108 in Figure 3.

Referring to claim 87, Lawler discloses generating said image-based promotional

data including image data identifying corresponding programs which are to be

transmitted (see Column 4, Lines 40-44 for generating a link to a video preview (stored

on the continuous media server 32), which is image-based promotional data and

includes image data corresponding to a program to be transmitted), said image data

representing reduced size images which have a display size that is less than the display

size for displayable data of said programs (see Column 4, Lines 40-44 for data stored

on the continuous media server 32 containing a video preview, which is displayed in

window 110 in Figure 3 (see Column 8, Lines 35-37) by using the link to a video preview

in the electronic program guide). Note that the window 110 shows that the image data

(link to preview data at the continuous media server 32) is represented by reduced size

images.

Lawler also discloses providing program data constituting at least one program

currently being transmitted (see Column 4, Lines 36-46 from providing electronic

program guide data, which represents programs being transmitted (see Figure 3 for an

example of the EPG displayed to a user). Note that the term "program data" is broad,

and can also constitute program data transmitted from the analog feed 40 to the

multiplexer 42 in Figure 1.

Lawler also discloses combining said image-based promotional data and said

program data to generate combined data (see Column 5, Lines 21-24 for combining the

EPG and continuous media server data using a multiplexer 42 in Figure 1).

Lawler also discloses transmitting the combined data (see Column 5, Lines 24-26

for multiplexing all information generated at the headend 12 in Figure 1).

Referring to claim 88-89, see rejection of claim 41 and 43, respectively.

Referring to claim 90, see rejection of claim 88 and 90.

Referring to claim 92, Lawler discloses receiving image-based promotional data

and program data transmitted on plural channels, said image-based promotional data

including image data identifying corresponding programs which currently are and will be

transmitted on several channels, said image data representing reduced size images

which have a display size that is less than the display size for displayable data of said

programs, and said program data including video and audio data of plural programs

currently being transmitted on respective channels (see rejection of claim 1).

Lawler also discloses receiving the program data transmitted on different

channels and the image-based promotional data transmitted with said program data

(see element 50 in Figure 3 and Column 5, Lines 57-60 for receiving the multiplexed

signal).

Lawler also discloses separating the image-based promotional data from the

received program data (see video decoder 54, which acts as a demodulator for the

digital data, therefore separating multiple digital signals (see Column 5, Lines 65-67).

Note that either the video decoder 54 can separate the electronic program guide

information and the video preview data, or the communication interpretation system can

separate the digital from the analog data using both video decoder 54 and demodulator

52 in Figure 3.

Lawler also discloses storing the separated image-based promotional data (see

Column 9, Lines 63-66 for storing electronic program guide data (which includes a link

to a video preview, which is displayed at a reduced size) in memory 60 in Figure 3).

Lawler also discloses displaying a program represented by the separated

program data (see Column 5, Lines 49-56 for displaying either an analog video program

or a digital video signal (i.e. electronic program guide)).

Lawler also discloses displaying said reduced size images represented by said

retrieved image-based promotional data (see window 110 in Figure 3), the reduced size

images being displayed in superposition over the displayed program (see Column 6,

Lines 15-27 for superimposing for mixing both analog and digital signals, therefore, the

preview video from the continuous media server 32 can be superimposed over the

electronic program guide data as well as the electronic program guide data

superimposed over the analog video signal).

Referring to claim 93, see rejection of claims 42-43.

Referring to claim 94, see rejection of claims 41-42.

Referring to claim 95-97, see rejection of claims 42-43 and 47, respectively.

Referring to claim 99, see rejection of claim 87.

Referring to claims 100-102, see rejection of claims 88-90, respectively.

Referring to claim 103, see rejection of claims 89 and 43 and also note that either

a program that is marked for recording on the EPG or a future program discloses

category data.

Referring to claim 105, see rejection of claim 92.

Referring to claims 106-109 and 111, see rejection of claims 41, 43, 42, 49 and

54, respectively.

Referring to claim 112, see rejection of claim 57.

Referring to claim 113, see rejection of claims 87 and 92.

Referring to claims 114-115, see rejection of claims 88-89, respectively.

Referring to claims 117, see rejection of claim 42.

Referring to claim 119, see rejection of claim 54.

Referring to claim 120, see rejection of claim 57.

Referring to claim 121, see rejection of claims 99 and 105.

Referring to claims 122-123, see rejection of claims 88-89, respectively.

Referring to claim 125, see rejection of claim 57.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 48, 50-51, 91, 98, 104, 110, 116, 124 and 126 rejected under 35 U.S.C.

103(a) as being unpatentable over Lawler et al. (U.S. Patent No. 5,805,763).

Referring to claim 48, see again Figure 3 for the EPG displaying programs that

are transmitted currently and at predetermined time periods. The examiner notes that if

the EPG is set to a program that is at a current time, then that program is currently

being transmitted, and if the program is a future program, then that program is for a

predetermined time period, therefore the EPG represents both types of data.

Lawler also discloses that program content data (see Column 4, Lines 40-46) is

associated with said programs currently being transmitted (note in Figure 1 that all data

from the servers 26 are multiplexed together with the programs being transmitted (see

MUX 42 in Figure 1) and also note that the program content data contains information

(such as a preview) that is associated with the programs being transmitted.

Lawler fails to teach transmitting program content data related to the programs transmitted for only a fraction of the time that is used to represent program guide data associated with programs to be transmitted. For example, program guide data transmitted to the set-top box and covers a span of 24 hours worth of programming, and program content data transmitted to the set-top box, will therefore only represent a fraction of this time (for example 4 hours worth of additional program content data associated with programs to be transmitted).

The examiner takes Official Notice that it is well known to transmit EPG and content data at different intervals. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the transmission system of Lawler, to transmit EPG data for a predetermined time period and program content data for a fraction of such predetermined time period, for the purpose of reducing the amount of memory needed at the set top box as well as avoiding memory overflow.

Referring to claim 50, Lawler discloses all of the limitations in claim 49, but fails to teach compressing and decompressing program data transmitted to a receiver. The examiner takes Official Notice that it is well known to compress and decompress program data. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the transmitter and receiver, as taught by Lawler, to utilize a compression scheme (such as MPEG2 for compression at the transmitter and decompression at the receiver), for the purpose of allowing more data to be transmitted to a user by conserving bandwidth.

Referring to claim 98, see rejection of claim 50.

Referring to claim 110, see rejection of claim 50.

Referring to claim 118, see rejection of claim 50.

Referring to claim 126, see rejection of claim 50.

Referring to claim 51, Lawler discloses multiplexing (see MUX 42 in Figure 1) plural broadcast channels (see analog feed 40 in Figure 1) and EPG data (see EPG server 34 in Figure 1) in a satellite distribution system (see Column 3, Lines 54-57), but fails to teach a demultiplexer. The examiner takes Official Notice that a demultiplexer is well known for demultiplexing multiplexed programming signals in a satellite television system. At the time the invention was made, it would have been obvious to modify the receiver, as taught by Lawler, using a demultiplexer for the purpose of properly separating the multiplexed EPG and programming signals.

Referring to claim 91, Lawler discloses supplying video and audio data of plural programs (see analog feed 40 in Figure 1), each being transmitted over a respective channel (see Column 5, Lines 4-16). Lawler fails to disclose compressing the video and audio data to produce compressed program data of said plural programs. The examiner takes Official Notice that it is well known in the art to compress program signals (using the MPEG compression standard) before transmission. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to compress the program signals from the analog feed 40, as taught by Lawler, for the purpose of reducing the amount of bandwidth required to transmit the program signals, thereby allowing more additional data to be transmitted along with the programming signals.

Referring to claim 104, see rejection of claim 91.

Referring to claim 116, see rejection of claim 91.

Referring to claim 124, see rejection of claim 91.

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 24th, 2004

VIVEK SRIVASTAVA
PRIMARY EXAMINER